IN THE CLAIMS

1. (Previously Presented) A method of rehabilitation comprising:

providing an actuator that includes a movement mechanism capable of applying a force that interacts with a motion of a patient's limb in a volume of at least 30 cm in diameter, in at least three degrees of freedom of motion of the actuator and capable of preventing substantial motion in any point in any direction in said volume;

coupling said actuator to a point on a human body;

applying a force vector to said point by said actuator, said force including a rotation.

2. (Previously Presented) A method according to claim 1, wherein said force vector includes at least two rotations directions relative to the force vector.

3. (Previously Presented) A method according to claim 1, comprising applying a second force to at least a second point on said body, simultaneously with said force.

4. (Previously Presented) A method of rehabilitation comprising:

providing a first actuator that includes a movement mechanism capable of applying a force that interacts with a motion of a patient's limb in a volume of at least 30 cm in diameter, in at least three degrees of freedom of motion of the actuator and capable of preventing substantial motion in any point in any direction in said volume;

coupling said first actuator to a first point on a human body;

providing a second actuator that includes a movement mechanism capable of applying a force that interacts with a motion of a patient's limb in a volume of at least 30 cm in diameter, in at least three degrees of freedom of motion of the actuator and capable of preventing substantial motion in any point in any direction in said volume;

coupling said second actuator to a second point on a human body; and

applying different forces to said points using said actuators.

5. (Previously Presented) A method according to claim 4, wherein said first actuator applies a rotation.

6. (Previously Presented) A method according to claim 4, wherein said different points are on a same limb.

7. (Previously Presented) A method according to claim 4, wherein said different points are on different limbs.

8. (Previously Presented) A method according to claim 7, comprising exercising the two limbs in concert.

9. (Previously Presented) A method according to claim 7, comprising copying motion from one limb to the other limb.

10. (Previously Presented) A method of reverse kinematics, comprising:

controlling motion of at least one point on an organ using an actuator that includes a movement mechanism capable of applying a force that interacts with a motion of a patient's limb in a volume of at least 30 cm in diameter, in at least three degrees of freedom of motion of the actuator and capable of preventing substantial motion in any point in any direction in said volume;

controlling a position of at least a second point on the organ; and

reconstructing by a computer of a value of a bending of at least one joint of said organ from said motion and said position.

11. (Currently amended) A rehabilitation device, comprising:

an actuator that includes a movement mechanism capable of applying a force that interacts with a motion of a patient's limb in a volume of at least 30 cm in diameter and capable of preventing substantial motion in any point in any direction in said volume;

a support for a patient; and

a controller adapted to adjust a rehabilitation exercise according to the relative positions of said actuator and at least one of said patient and said support.

12. (Previously Presented) A device according to claim 11, comprising a distance sensor for determining said relative positions.

13. (Previously Presented) A device according to claim 11, comprising an imaging sensor for determining said relative positions.

14. (Previously Presented) A device according to claim 11, wherein said controller relates to the relative placement of said patient and said actuator.

15. (Previously Presented) A device according to claim 11, wherein said controller assumes the relative positions differ only in two dimensions.

16. (Previously Presented) A device according to claim 11, comprising a pointer which indicates a desired patient placement.

17. (Previously Presented) A device according to claim 11, wherein said controller is configured to use said actuator to determine said relative placement.

18. (Previously A device according to claim 11, wherein said controller is configured to use said actuator to indicate a desired relative placement.

19. (Previously Presented) A device according to claim 11, wherein said controller is configured to adjust said exercise on the fly, during an exercise session and in response to patient movement.

20. (Previously Presented) A rehabilitation device, comprising:

a memory storing therein a correspondence between exercises and payment codes;

a controller adapted to control a rehabilitating exercise and generate a report including a code from said memory corresponding to said exercise.

21. (Previously Presented) A rehabilitation device, comprising:

at least one actuator adapted to support motion of a body part;

at lest one sensor associated with the actuator and measuring said motion; and

a controller which analyses said measured motion and generates a measure of quality of motion and which modifies a rehabilitation plan responsive to said quality of motion measure.

22. (Previously Presented) A device according to claim 21, wherein the controller modifies a selection of future exercises according to a measured quality of motion.

23. (Previously Presented) A device according to claim 21, wherein the controller modifies a selection of parameters for future exercises according to a measured quality of motion.

24. (Previously Presented) A device according to claim 21, wherein the quality of motion measure used is defined as the degree of matching to a 2/3 power law.

25. (Previously Presented) A method of rehabilitation, comprising:
causing a person to carry out at least one exercise;
estimating a mental state of said person from a result of said at least one exercise; and
automatically selecting at least one second exercise according to said estimation.

26. (Previously Presented) A method according to claim 25, wherein estimating a mental step comprises comparing performance between two exercises, one or which is expected to elicit a higher compliance.

27. (Previously Presented) A method according to claim 25, wherein estimating a mental step comprises comparing performance within an exercise, using the maximum ability of the patient as a base line against which variation can be determined.

28. (Previously Presented) A method according to claim 25, wherein said estimating is automatic.

29. (Previously Presented) A method of rehabilitation, comprising:
determining a patient's ability to perform a motor task;
determining a patient's ability to perform a non-motor task; and
automatically selecting an exercise or parameters of an exercise for the patient according to said determinations.

30. (Previously Presented) A method according to claim 29, wherein said selecting comprises matching an instruction or feedback modality to a perceptive ability.

31. (Previously Presented) A method according to claim 29, wherein said selecting comprises matching an instruction or feedback modality to a cognitive ability.

32. (Previously Presented) A method according to claim 29, wherein said selecting comprises an exercise or series of exercises designed to rehabilitate both of said motor and said non-motor abilities.

33. (Previously Presented) A method according to claim 29, wherein said exercise rehabilitates visual-motor coordination.

34. (Currently amended) A method of rehabilitation comprising;

moving a motorized actuator having a tip to a spatial position within a volume having a diameter of at least 30 cm, wherein said actuator is capable of preventing substantial motion in any point in any direction in said volume; and

instructing a patient to apply force against said tip, wherein said actuator provides a compliant resistance to said force.

35. (Previously Presented) A method according to claim 34, comprising selecting the resistance according to the spatial location.